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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,273	07/31/2003	Warren M. Farnworth	MI22- 2379	5475
21567	7590	09/07/2004	EXAMINER	
WELLS ST. JOHN P.S. 601 W. FIRST AVENUE, SUITE 1300 SPOKANE, WA 99201			KOBERT, RUSSELL MARC	
			ART UNIT	PAPER NUMBER
			2829	
DATE MAILED: 09/07/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/632,273	Applicant(s) FARNWORTH ET AL.	
	Examiner Russell M Kobert	Art Unit 2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 31-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 31-33, 36-39 and 41 is/are rejected.
- 7) ☒ Claim(s) 34, 35 and 40 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>0703 &amp; 0604</u> . | 6) <input type="checkbox"/> Other: _____  |

1. The abstract of the disclosure is objected to because it is directed to a method of engaging whereas the claimed invention is directed to an apparatus. Correction is required. See MPEP § 608.01(b).

2. In claim 31, line 2, a grammatical error exists. The word "is" has been interpreted to mean "in". Corrective action is required.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

4. Claims 31, 32, 36, 37, 38, 39 and 41 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Leedy (5323035).

5. Claims 31-33, 36-39 and 41 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Blonder et al (4937653).

6. Claims 31-33, 36, 38 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Reid et al (4585991).

Reid et al anticipates an engagement probe (Figure 1) formed from a semiconductor material (silicon crystal noted within col 4, ln 37-43) and having a grouping of a plurality of projecting apexes (note 2 protrusions (1) shown in Figure 1) positioned in sufficient proximity to one another to collectively engage a single conductive pad on a semiconductor substrate; as recited in claim 31.

As to claim 32, Reid et al shows a plurality of such groupings for engaging multiple conductive pads on the semiconductor substrate (col 4, ln 50-60).

As to claim 33, Reid et al shows the apexes are in the shape of multiple knife-edge lines (Fig 2a which is a top view of Fig 1; note lines crossing at center).

As to claim 36, Reid et al shows the grouping of apexes formed on a projection from a substrate (considered inherent to the shape of protrusions (1) shown in Figure 1 having apex tips).

As to claim 38, Reid et al shows the apexes project from a common plane, the apexes having respective tips and bases, the bases of adjacent projecting apexes being spaced from one another to define a penetration stop plane (horizontal portion shown in Figure 1 between the two protrusions) there-between.

As to claim 41, Reid et al shows the outermost portions of the electrically conductive apexes constitute a first electrically conductive material and the conductive pads for which the probe is adapted have outermost portions constituting a second

electrically conductive material; the first and second electrically conductive materials being different (col 4, ln 43-60).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 37 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reid et al (4585991).

Reid et al shows the engagement probes further having apexes projecting from a common plane, the apexes having respective tips and bases, the bases of adjacent projecting apexes being spaced from one another to define a penetration stop plane

there-between (horizontal portion shown in Figure 1 between the two protrusions) as mentioned in claim 39. Reid et al further shows the engagement probes having apexes or tips at a selected projecting distance from the penetration stop plane, as mentioned in claims 37 and 39.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the projecting distance being about one-half the thickness of the conductive pad which the apparatus is adapted to engage as mentioned in claims 37 and 39 because determination of the quantitative value of the projecting distance does not provide any unexpected, or non-obvious result and would have been one of numerous parameters chosen by the ordinary skilled artisan during routine experimentation.

10. The following is a statement of reasons for the indication of allowable subject matter:

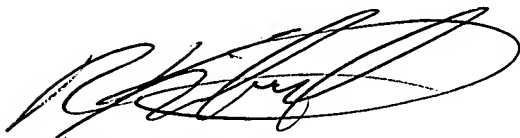
Claims 34, 35 and 40 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. The added limitations of multiple knife-edge lines being positioned to form at least one polygon as mentioned in claims 34 and 40 or positioned to form at least two polygons one of which is received entirely within the other as mentioned in claim 35 have not been found. It is further noted that the examiner's reasons are understood to be predicated upon consideration of each of the claims as a whole, and not upon any specific elements of the claims.

11. A shortened statutory period for response to this action is set to expire three month(s) from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell Kobert whose telephone number is (571) 272-1963.

The Examiner's Supervisor, Michael J. Tokar, can be reached at (571) 272-1812.

For an automated menu of Tech Center 2800 phone numbers call (571) 272-2800.



Russell M. Kobert  
Patent Examiner  
Group Art Unit 2829  
August 24, 2004



Michael Tokar  
Supervisory Patent Examiner  
Technology Center 2800